



AD4RD: Anaerobic Digestion for Rural Development

Attitudes towards on-farm AD from farmers and the public: results from surveys

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AD4RD: Farmer survey

- Why?

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- Why?
- When?

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- Why?
- When?
- Who?

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- Why?
- When?
- Who?
- How?

AD4RD: Farmer survey

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- biased towards larger farms but representative in age and tenure terms

AD4RD: Farmer survey

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AD4RD: Farmer survey

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- but, differences between 'possible adopters' and the 'likely non-adopters'

AD4RD: Farmer survey

Perceived benefits of adopting AD:

	V. imp.	Imp.	Not v. imp	No imp.
Improve profit	44.6	36.0	8.7	10.7
Reduce pollution	17.9	54.9	16.0	11.2
Reduce carbon footprint	11.9	52.7	20.9	14.5

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The proportion (%) of respondents listing perceived obstacles to adopting AD:

	Very important	Important	Not very important	Of no importance
The returns seem too low	38.2	50.7	6.3	4.8
Establishment costs seem too high	67.6	25.8	2.7	3.9
I don't think I could learn to run it	4.8	18.5	44.8	31.9
I don't have enough spare labour to operate it	12.9	34.1	33.7	19.3
The residues would not be worthwhile as a fertiliser	13.6	35.1	27.9	23.4
My tenancy agreement would not permit it	8.4	14.0	13.2	64.4
Difficulty obtaining planning permission	26.3	42.8	17.5	13.4
Growing feedstock would disrupt my rotation	20.2	32.6	28.8	18.4
Little information available	24.1	44.5	18.6	12.8

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Could they do much of the building work themselves:

Yes: 45%

No: 55%

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Areas (ha) they might plant for feedstock:

		% of existing area of each type
Cereal land	3517	21.9
Land growing other arable crops	674	9.3
Land growing leys	1131	48.4
Land under permanent pasture	772	19.7
Rough grazing	290	64.0
Other land	176	16.1
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	6560 ha	21.1

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Estimates of gas from survey farms:

From crops and forage	25.7M m ³
From beef and dairy cows and pigs	1.5M m ³ ----- 27.2M m ³

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Raising the gas estimates to the England level:

Survey farms' gas → 27.2M m³

Raising factor → 38,750 likely adopters

So, England total → 1.05B m³

And, the electricity from this is 3.66 GWh

AD4RD: Consumer survey

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Views (%) on the use of human food and animal feed crops to generate renewable energy:

- Agree – 58

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Views (%) on the use of human food and animal feed crops to generate renewable energy:

- Agree – 58
- Neither / nor – 32

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- Agree – 58
- Neither / nor – 32
- Disagree - 10

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Assessment of benefits of AD in terms of importance (%):

	Important	Neither / nor	Not important
It helps combat climate change by reducing methane emissions from agriculture	76	24	0
It generates more income for farmers	78	32	0
It contributes to energy security	74	26	0
It reduces need for landfill by processing organic wastes	81	16	3
It generates more employment on farms and thus helps the rural economy	76	21	3
It reduces pollution of ground water, streams and rivers	73	24	3
It reduces dependence on inorganic fertilisers	66	29	5
It reduces disease risk from animal slurries	63	32	5

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Assessment of possible problems arising from AD on farms (%):

	Significant	Neither / nor	Not significant
AD plant and equipment is visually intrusive	38	35	27
AD plants generate strong odours	54	19	27
Storing large amounts of gas on farms is dangerous	54	27	19
Importing wastes onto farms will generate a lot of lorry traffic on rural roads	62	27	11
AD requires more housing of animals to capture manures	54	38	8
AD would further damage the image of farming	27	35	38

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Which of the following organic materials should be used in farm AD for energy (%):

	Yes	No	Maybe
Cattle and pig manure	82	5	13
Food crops for humans	32	39	29
Food crops for animals	42	29	29
Waste food and garden waste imported	71	13	16

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What products derived from digestate would you buy (%):

	Yes	No	Possibly	Don't know
Food grown on land fertilised with digestate	72	5	18	5
Garden compost made from digestate	82	3	10	5
Animal bedding made from dried digestate	56	8	26	10

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- 21% of respondents would pay over £10 pa

AD4RD: Consumer survey

All consumer survey answers are set against :

- Male / female
- Age
- Education
- Employment status
- Household income
- Rural / urban location